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                 STN pricing information for 2008 now available
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                 prophetic substances
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                 USPATFULL, USPAT2, and USPATOLD enhanced with new
                 custom IPC display formats
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         JAN 28
                 MARPAT searching enhanced
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         JAN 28
                 USGENE now provides USPTO sequence data within 3 days
                 of publication
         JAN 28
NEWS
                 TOXCENTER enhanced with reloaded MEDLINE segment
                 MEDLINE and LMEDLINE reloaded with enhancements
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NEWS 11 FEB 25
                 IFIREF reloaded with enhancements
NEWS 12 FEB 25
                 IMSPRODUCT reloaded with enhancements
NEWS 13 FEB 29
                 WPINDEX/WPIDS/WPIX enhanced with ECLA and current
                 U.S. National Patent Classification
                 IFICDB, IFIPAT, and IFIUDB enhanced with new custom
NEWS 14
         MAR 31
                 IPC display formats
NEWS 15
         MAR 31
                 CAS REGISTRY enhanced with additional experimental
NEWS 16
                 CA/CAplus and CASREACT patent number format for U.S.
         MAR 31
                 applications updated
NEWS 17
         MAR 31
                 LPCI now available as a replacement to LDPCI
NEWS 18 MAR 31
                 EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 19 APR 04
                 STN AnaVist, Version 1, to be discontinued
NEWS 20 APR 15
                 WPIDS, WPINDEX, and WPIX enhanced with new
                 predefined hit display formats
NEWS 21 APR 28
                 EMBASE Controlled Term thesaurus enhanced
NEWS 22 APR 28
                 IMSRESEARCH reloaded with enhancements
NEWS 23 MAY 30
                 INPAFAMDB now available on STN for patent family
                 searching
         MAY 30
NEWS 24
                 DGENE, PCTGEN, and USGENE enhanced with new homology
                 sequence search option
NEWS 25
         JUN 06
                 EPFULL enhanced with 260,000 English abstracts
NEWS 26
         JUN 06
                 KOREAPAT updated with 41,000 documents
NEWS 27
         JUN 13
                 USPATFULL and USPAT2 updated with 11-character
                 patent numbers for U.S. applications
NEWS 28
         JUN 19
                 CAS REGISTRY includes selected substances from
                 web-based collections
NEWS 29
         JUN 25
                 CA/CAplus and USPAT databases updated with IPC
                 reclassification data
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NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3, AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008. NEWS HOURS STN Operating Hours Plus Help Desk Availability

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=> file reg

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
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0.21

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chain nodes : 10 11 12 13 14

ring nodes :

1 2 3 4 5 6 7 8 9

chain bonds :

3-10 10-11 10-12 12-13 12-14

ring bonds :

1-2 1-7 2-3 2-9 3-4 4-5 4-8 5-6 6-7 8-9

exact/norm bonds :

2-9 3-10 4-8 10-12 12-13 12-14

exact bonds :

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isolated ring systems :

containing 1 :

Match level :

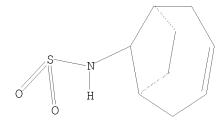
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS

L1 STRUCTURE UPLOADED

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L1 HAS NO ANSWERS

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FULL SEARCH INITIATED 15:02:09 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 496 TO ITERATE

100.0% PROCESSED 496 ITERATIONS 13 ANSWERS

SEARCH TIME: 00.00.01

L2 13 SEA SSS FUL L1

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COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 178.36 178.57

FILE 'CAPLUS' ENTERED AT 15:02:13 ON 25 JUN 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE COVERS 1907 - 25 Jun 2008 VOL 148 ISS 26 FILE LAST UPDATED: 24 Jun 2008 (20080624/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

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=> s 12 full L3 4 L2

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L3 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:141037 CAPLUS

DOCUMENT NUMBER: 142:240436

TITLE: Preparation of spirobicyclononenethiadiazole dioxides

and related compounds as  $\gamma$ -secretase inhibitors

INVENTOR(S): Bettati, Michela; Boase, Amanda Louise; Churcher, Ian;

Ladduwahetty, Tamara; Merchant, Kevin John; Quddus,

Abdul

PATENT ASSIGNEE(S): Merck Sharp & Dohme Limited, UK

SOURCE: PCT Int. Appl., 39 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.					KIND DATE			APPLICATION NO.							DATE				
WO	WO 2005014553					A1 20050217				WO 2004-GB3277						20040729			
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		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,		
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		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,		
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CA	CA 2534057				A1		2005	0217	CA 2004-2534057										
EP	1658				A1 20060524					EP 2	2004-		2	0040	729				
EP	1658	272			В1		2007	0725											
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ORITY APPLN. INFO.:				.:						GB 2	2003-	1844	7		A 2	0030	805		
										WO 2	2004-0	GB32	77	,	W 2	0040	729		
IER SO	DURCE	(5) .			CASI	REAC	т 14	2 . 241	1436	<ul> <li>MZ</li> </ul>	RPAT	142	.240	436					

OTHER SOURCE(S): CASREACT 142:240436; MARPAT 142:240436

GΙ

Title compds. [I; n = 0, 1; X = atoms to form a 5-6 membered heteroarom. ring; R5 = (halo-substituted) hydrocarbyl; Ar = (substituted) Ph, 6-membered heteroaryl; Y = bond, NR3; R1 = H; R1R3 = CH2; R2 = (halo-substituted) hydrocarbyl, (substituted) 5-6 membered heteroaryl; R2R3 = atoms to form a (substituted) heterocyclic ring of  $\leq$ 6 members; R3 = H, alkyl; R4 = halo, alkyl], were prepared as  $\gamma$ -secretase inhibitors (no data). Thus title compound (II) was prepared in several steps from bicyclo[4.2.1]non-3-en-9-one, tert-Bu sulfinamide, F3CCH2NH2, POC13/DMF, and [5-(4-fluorophenyl)-1-methyl-1H-pyrazol-3-yl]methyltriphenylphosphonium chloride.

IT 844880-01-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of spirobicyclononenethiadiazole dioxides and related compds. as  $\gamma\textsubscript{-secretase}$  inhibitors)

II

RN 844880-01-9 CAPLUS

CN Sulfamide, N-[3-chloro-4-[(1E)-2-[5-(4-fluorophenyl)-1-methyl-1H-pyrazol-3-yl]ethenyl]bicyclo[4.2.1]non-3-en-9-yl]-N'-propyl- (CA INDEX NAME)

Double bond geometry as shown.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:133023 CAPLUS

DOCUMENT NUMBER: 138:169963

TITLE: Synthesis of sulfonamido-substituted bridged

bicycloalkyl derivatives for control of beta-amyloid

production

INVENTOR(S): Hannam, Joanne Claire; Harrison, Timothy; Madin,

Andrew; Sparey, Timothy Jason Merck Sharp & Dohme Limited, UK

SOURCE: PCT Int. Appl., 67 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT ASSIGNEE(S):

PA	PATENT NO.					D	DATE		APPLICATION NO.						DATE			
WO	WO 2003013506					_	20030220		WO 2002-GB3559						20020731			
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AU	2002	3553	59		A1		20030224			AU 2002-355359					20020731			
US	2004	0186	147		A1		2004	0923		US 2004-484290					20040120			
US	US 7205434						2007	0417										
PRIORIT	PRIORITY APPLN. INFO.:									GB 2	2001-	1915.	2		A 2	0010	806	
										WO 2	2002-	GB35	59	,	W 2	0020	731	
OTHER S	OTHER SOURCE(S):					PAT	138:	1699	63									

## \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. I [A,B = together with the carbon atoms bonded to L1R4 and H complete a (un)substituted ring containing 5-10 carbon atoms; R1 = H, alkyl, alkenyl; R2 = H, acyl; R3 = alkyl, cycloalkyl, alkenyl, alkynyl, aryl, etc.; R4 = H, halo, aryl, heterocyclyl, CN, alkoxy, amino, etc.; L1 = bond, alkylene, etc.] are prepared For instance, Et cyclopentanone-2-carboxylate was reacted with o-xylylene dibromide (DMF, NaOEt) and the resulting adduct treated with LDA in THF at -78° to give II. II was treated in the following manner: i. THF, H2NOH•HCl, NaOAc; ii. HOAc, H2-PtO; iii. CH2Cl3, Et3N, 5-chlorothiophenesulfonyl chloride and iv. THF, LAH to provide sulfonamide III. I modulate the production of β-amyloid from amyloid precursor protein and are useful in the treatment of Alzheimer's disease.

IT 497862-61-0P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(synthesis of sulfonamido-substituted bridged bicycloalkyl derivs. for control of beta-amyloid production)

RN 497862-61-0 CAPLUS

CN Bicyclo[4.2.1]non-3-ene-1-carboxylic acid, 9-[[(5-chloro-2-

thienyl)sulfonyl]amino]-, ethyl ester, (1R,6R,9S)-rel- (CA INDEX NAME)

IT 497862-62-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(synthesis of sulfonamido-substituted bridged bicycloalkyl derivs. for control of beta-amyloid production)

RN 497862-62-1 CAPLUS

CN 2-Thiophenesulfonamide, 5-chloro-N-[(1R,6R,9S)-1-(hydroxymethyl)bicyclo[4.2.1]non-3-en-9-yl]-, rel- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:353420 CAPLUS

DOCUMENT NUMBER: 136:369505

TITLE: Synthesis of sulfonamido-substituted bridged

bicycloalkyl derivatives as  $\gamma$ -secretase

inhibitors

INVENTOR(S): Collins, Ian James; Hannam, Joanne Claire; Harrison,

Timothy; Lewis, Stephen John; Madin, Andrew; Sparey,

Timothy Jason; Williams, Brian John

PATENT ASSIGNEE(S): Merck Sharp & Dohme Limited, UK

SOURCE: PCT Int. Appl., 151 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

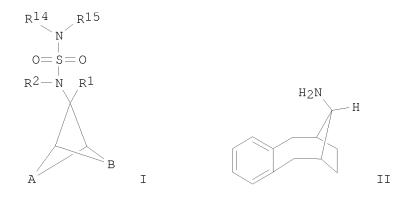
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

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								CA 2001-2427206										
	AU 2002010747																	
	EP 1334085									ΕP	2001-	9786	52		2	20011	029	
EP	1334																	
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ES	2248	397			Т3						2001-					20011		
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0.000							100			WO	2001-	GB48	17		W 2	20011	029	

OTHER SOURCE(S): MARPAT 136:369505

GI



$$\begin{array}{c|c} & O \\ & | & H \\ N-S-N \\ & | & \\ O \end{array}$$

AΒ Title compds. I [A, B = (CXY)p, (CXY)qCY=CY(CXY)r, (CXY)xNR13(CXY)y, etc.; X = halo, R9, OR9, SR9, S(0)1-2R10, OSO2R9, N(R9)2, COR9, CO2R9, etc.; Y =H, alkyl or X, Y together = O, S, N-OR11, CHR11; provided neither A nor B comprises more than one CXY moiety which is other than CH2; p = 1-6; q, r, x, y = 0-2; provided that at least one of A and B comprises a chain of 2 or more atoms, such that the ring completed by A and B contains at least 5 atoms; R1 = H, alk(en)yl or R1 and R15 together may complete a 5-, 6- or 7-membered cyclic sulfamide; R2 = H, C1, alkyl, aryl, aryl-alkyl, cycloalkyl, acyl, etc.; R9 = H or R10 or two R9 groups together with a nitrogen atom to which they are mutually attached may complete a pyrrolidine, piperidine, piperazine, etc.; R10 = alkyl, perfluoroalkyl, cycloalkyl, etc.; R11 = H, alkyl, etc.; R14 = H, alkyl, etc.; R15 = H, alkyl or R15 and R1 together complete a 5-, 6- or 7-membered cyclic sulfamide] were prepared Over 150 synthetic examples were disclosed. For instance, prior art amine II was sulfonylated with catechol sulfate and the intermediate treated with n-PrNH2 (dioxane, 80°C, 1 h) to give III. I are inhibitors of  $\gamma$ -secretase and are cytotoxic with EC50 <  $10~\mu\mathrm{M}$  for human app695. Compds. of the invention are useful in the treatment of and/or prevention of Alzheimer's disease. ΙT 423167-24-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug; synthesis of sulfonamido-substituted bridged bicycloalkyl derivs. as  $\gamma\text{-secretase}$  inhibitors)

RN 423167-24-2 CAPLUS

CN Sulfamide, N-(9-syn)-bicyclo[4.2.1]non-3-en-9-yl-N'-propyl- (CA INDEX NAME)

Relative stereochemistry.

IT 423168-72-3P

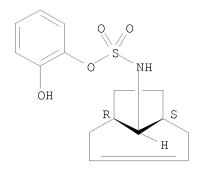
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; synthesis of sulfonamido-substituted bridged bicycloalkyl derivs. as  $\gamma\text{-secretase}$  inhibitors)

RN 423168-72-3 CAPLUS

CN Sulfamic acid, N-(9-syn)-bicyclo[4.2.1]non-3-en-9-yl-, 2-hydroxyphenyl ester (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT:

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:713298 CAPLUS

DOCUMENT NUMBER: 135:272746

TITLE: Synthesis of sulfonamido-substituted bridged

bicycloalkyl derivatives as  $\gamma$ -secretase

inhibitors

INVENTOR(S): Belanger, Patrice Charles; Collins, Ian James; Hannam,

Joanne Claire; Harrison, Timothy; Lewis, Stephen John; Madin, Andrew; McIver, Edward Giles; Nadin, Alan John;

Neduvelil, Joseph George; Shearman, Mark Steven; Smith, Adrian Leonard; Sparey, Timothy Jason; Stevenson, Graeme Irvine; Teall, Martin Richard

PATENT ASSIGNEE(S): Merck Sharp & Dohme Limited, UK; Merck Frosst Canada +

SOURCE: PCT Int. Appl., 199 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PA'	PATENT NO.						KIND DATE			APPLICATION NO.						DATE			
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		HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG	, KP,	KR,	KΖ,	LC,	LK	, LR,	LS,		
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW	, MX,	MΖ,	NO,	NΖ,	PL	, PT,	RO,		
		RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM	I, TR,	TT,	TZ,	UA,	UG	, US,	UZ,		
		VN,	YU,	ZA,	ZW														
	RW:	GH,	GM,	ΚE,	LS,	MW,	MΖ,	SD,	SL,	SZ	, TZ,	UG,	ZW,	ΑT,	BE	, СН,	CY,		
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙT	, LU,	MC,	NL,	PT,	SE	, TR,	BF,		
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GW,	ML	, MR,	ΝE,	SN,	TD,	ΤG				
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OTHER SOURCE(S): MARPAT 135:272746

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<sup>\*</sup> STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Title compds. I [A, B = (CXY)p; (CXY)qCY:CY(CXY)r; (CXY)xNR13(CXY)y; etc.; AB X = halo, alkoxy, sulf(a/i/o)nyl, amino, acyl, etc.; Y = H, alkyl; or Xand Y together represent :O, :S, :N-OR, :CH; provided neither A nor B comprises more than one -CXY-moiety which is other than CH; Z completes a

(non)aromatic ring system of 5 to 10 atoms, of which 0 to 3 are selected from N, O and S and the remainder are C; Z1 completes a nonarom. ring system of 5 to 10 atoms, of which 0 to 3 are independently selected from 0, N and S  $\,$ and the remainder are C; Z2 completes a 5- or 6-membered heteroaryl ring; m, n = 0 - 1; p = 1 - 6; q, r, = 0 - 2; x, y = 0 - 2; provided that when m= n = 0, at least one of A and B comprises a chain of 2 or more atoms, such that the ring completed by A and B contains at least 5 atoms; R1 = H, alkyl, alkenyl; R2 = H, alkyl, aryl(alkyl), cycloalkyl, acyl; R3 = (cyclo)alkyl, alkenyl, alkynyl, (hetero)arylalkyl, etc.] were prepared Over 270 synthetic examples were disclosed. For instance, 1,2-Bis(bromomethyl)benzene was added to 1-cyclopent-1-enylpyrrolidine (CH3CN, (i-Pr)2NEt) to give iminum bromide II. II was converted to the oxime (EtOHaq, NH2OH, NaOAc); the oxime was reduced (HOAc, PtO2, H2 @ 30 psi, 2 h) and the resulting amine sulfonylated (DCM, pyridine, p-TsCl, 16 h) to give III. I are inhibitors of  $\gamma\text{-secretase}$  and are cytotoxic with EC50 < 10  $\mu M$  for human app695. Compds. of the invention are useful in the treatment of and/or prevention of Alzheimer's disease.

IT 362654-13-5P 362654-14-6P 362654-15-7P 362654-16-8P 362654-17-9P 362654-66-8P 362654-67-9P 362654-68-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug; synthesis of sulfonamido-substituted bridged bicycloalkyl derivs. as  $\gamma\text{-secretase}$  inhibitors)

RN 362654-13-5 CAPLUS

CN Benzenesulfonamide, N-(9-syn)-bicyclo[4.2.1]non-3-en-9-yl-4-methyl- (CA INDEX NAME)

Relative stereochemistry.

RN 362654-14-6 CAPLUS

CN Benzenesulfonamide, N-(9-syn)-bicyclo[4.2.1]non-3-en-9-yl-4-fluoro- (CA INDEX NAME)

Relative stereochemistry.

RN 362654-15-7 CAPLUS

CN Benzenesulfonamide, N-(9-syn)-bicyclo[4.2.1]non-3-en-9-yl- (CA INDEX NAME)

Relative stereochemistry.

RN 362654-16-8 CAPLUS

CN 2-Thiophenesulfonamide, N-(9-syn)-bicyclo[4.2.1]non-3-en-9-yl- (CA INDEX NAME)

Relative stereochemistry.

RN 362654-17-9 CAPLUS

CN 2-Thiophenesulfonamide, N-(9-syn)-bicyclo[4.2.1]non-3-en-9-yl-5-chloro-(CA INDEX NAME)

Relative stereochemistry.

RN 362654-66-8 CAPLUS

CN Benzenesulfonamide, N-[(9-syn)-9-methylbicyclo[4.2.1]non-3-en-9-yl]- (CA INDEX NAME)

Relative stereochemistry.

RN 362654-67-9 CAPLUS

CN 2-Thiophenesulfonamide, 5-chloro-N-[(9-syn)-9-methylbicyclo[4.2.1]non-3-en-9-yl]- (CA INDEX NAME)

Relative stereochemistry.

RN 362654-68-0 CAPLUS

CN 2-Thiophenesulfonamide, 5-chloro-N-[(9-syn)-9-(2-propen-1-yl)bicyclo[4.2.1]non-3-en-9-yl]- (CA INDEX NAME)

Relative stereochemistry.

REFERENCE COUNT:

13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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